

SYNOPSIS OF THE SPECIES OF SAWFLIES BELONGING TO THE GENUS DIMORPHOPTERYX.

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The North American species belonging to the genus *Strongylogaster* and to the section *pinguis* in Norton's classification were made into a genus by Ashmead in his synopsis of the genera of sawflies. For a number of years all the species belonging to this genus had been assembled under one name, and biological notes on some of them published under that name. In 1910 *melanognathus* was described from one specimen from New Brunswick, Canada, and in 1911 Rohwer¹ tabulated the species and characterized certain forms as varieties. Recent rearings and more careful study of the adult brought three new species to light and also emphasized the specific identity of the forms treated as varieties in the last-mentioned paper.

This paper is a contribution from the Branch of Forest Insects, Bureau of Entomology.

Key to the species.

- Scutellum strongly convex; transverse radius wanting; mesoprescutum rufous; basal plates pale..... *abnormis* Rohwer, p. 446.
- Scutellum not strongly convex; transverse radius present; mesoprescutum black; basal plates black or brown..... 1.
1. Four apical abdominal segments black; (mandibles, antennae, clypeus and labrum black)..... *melanognathus* Rohwer, p. 446.
- Abdomen beyond basal plate pale except sometimes sheath is black..... 2.
2. Females (scutellum yellow) 3.
- Males (scutellum usually black, though in one case, yellow) 7.
3. Apical margin of the clypeus depressed; (clypeus subsquarely emarginate; lobes rectangular; the anterior margin pale; four anterior femora pale).
errans Rohwer, p. 446.
- Apical margin of the clypeus not depressed..... 4.
4. Anterior margin of the clypeus arcuately or subangulately emarginate; lobes triangular..... 5.
- Anterior margin of the clypeus subsquarely emarginate; lobes rectangular..... 6.
5. Antennae black; ocellar basin just below the ocellus shining, evenly concave, fan-shaped..... *virginica* Rohwer, p. 446.
- Antennae pale; ocellar basin just below the ocellus with a furrow in the center.
pinguis (Norton), p. 447.

¹ Proc. U. S. Nat. Mus., vol. 41, p. 403, etc.

6. Anterior margin of the clypeus yellowish; antennae piceous; mesepisternum with a pale spot basally; tibiae black apically.....*autumnalis* Rohwer, p. 447.
Clypeus black; antennae black; mesepisternum black; apex of the posterior tibiae black.....*castaneae* Rohwer, p. 447.
7. Fifth to eighth antennal joints without a ventral apical curved projection; postocellar area and area latrad of the lateral ocelli without large punctures; (clypeus shining, subangulately emarginate; supraclypeal area convex, not moundlike; lower angle of cheek not produced).....*virginica* Rohwer, p. 446.
Fifth to eighth antennal joints with a curved ventral apical projection; postocellar area and area latrad of the ocellus with large punctures..... 8.
8. Scutellum with a pale spot; apical margin of the clypeus pale; antennae entirely pale; lower angle of cheek not produced; (clypeus broadly subsquarely emarginate; lobes truncate; supraclypeal area convex).....*quercivora* Rohwer, p. 448.
Scutellum black; apical margin of clypeus black; antennae, except apices, piceous; lower angle of cheek produced..... 9.
9. Supraclypeal area flat; wings dusky; apical sternite black...*errans* Rohwer, p. 446.
Supraclypeal area convex, in general outline triangular; wings hyaline; apical sternite rufous.....*castaneae* Rohwer, p. 447.

DIMORPHOPTERYX ABNORMIS Rohwer.

Dimorphopteryx abnormis ROHWER, Proc. U. S. Nat. Mus., vol. 41, 1911, p. 406.

This species is remarkable in the convex scutellum and the loss of the transverse radius.

DIMORPHOPTERYX MELANOGNATHUS Rohwer.

Dimorphopteryx melanognathus ROHWER, Proc. U. S. Nat. Mus., vol. 39, 1910, p. 205; vol. 41, 1911, p. 405.

The description of this species, dealing with the clypeus, may be elaborated as follows: Clypeus deeply, arcuately emarginate, almost subangular; lobes broadly triangular; supraclypeal area flat except a small rounded median tubercule.

DIMORPHOPTERYX ERRANS Rohwer.

Strongylogaster pinguis DYAR, Trans. Amer. Ent. Soc., vol. 22, 1895, p. 311; Journ. N. Y. Ent. Soc., vol. 5, 1897, p. 199 probably.

Parasiobla rufocinctus HOWARD, Insect Book, 1904, pl. 14, fig. 26.

Dimorphopteryx pinguis errans ROHWER, Proc. U. S. Nat. Mus., vol. 41, 1911, p. 406.

As far as I am able to ascertain from the published records the host plants of this species are black oak, birch, and linden. It may be that in Dyar's rearing he had more than one species included. As far as recent rearings are available no species has more than one host plant, and all the larvae belonging to this genus are so similar superficially that field determinations or determinations not based on adults can not be relied upon.

This species is known from New York State only.

DIMORPHOPTERYX VIRGINICA Rohwer.

Dimorphopteryx pinguis virginica ROHWER, Proc. U. S. Nat. Mus., vol. 41, 1911, p. 406.

This may be considered as a good species. The following characters will aid in the identification. Lobes of the clypeus about twice as

long as the basal width, their apices, obtusely triangular; four anterior femora yellowish or reddish; transverse radius received basad of the middle of the cell.

DIMORPHOPTERYX PINGUIS (Norton).

Allantus pinguis NORTON, Boston Journ. Nat. Hist., vol. 7, pt. 2, 1860, p. 244.

Strongylogaster pinguis NORTON, Catalogue, p. 150.

Dimorphopteryx pinguis ASHMEAD, Can. Ent., vol. 30, 1898, p. 308.—ROHWER, Proc.

U. S. Nat. Mus., vol. 41, 1911, p. 405.

The type-specimen of this species is lost, but a neotype is in the United States National Museum.

MacGillivray¹ says that Provancher's *Sciapteryx punctum* is the female of this species. I have not examined the Provancher type, but accept the synonymy. Some of Doctor Dyar's rearings may refer to this species, but some of them refer to *errans*. If all other of Doctor Dyar's rearings refer to *errans*, the host plants of *pinguis* are *Amelanchier canadensis* and Maple.

DIMORPHOPTERYX AUTUMNALIS, new species.

Female.—Length, 8 mm. Labrum broadly rounded apically; clypeus gently convex, sparsely punctured, the apical margin subsquarely emarginate, the lobes rectangular, about one-third as wide as the width of the emargination; supraclypeal area flat; area latrad of the ocelli, postocellar area and posterior orbits, shining, practically impunctate; ocellar basin with broad sloping walls, distinct furrow from the anterior ocellus to the ventral margin of the basin; postocellar furrow straight; third antennal joint one-third longer than the fourth; scutum and prescutum sculptured similarly; punctures of the scutellum large; sheath with dorsal margin straight, apical margin subtruncate, lower angle broadly rounded. Black; labrum, apex of the clypeus, posterior lateral margin of the pronotum, tegulae, scutellum, four anterior legs below the middle, the coxae, most of the posterior coxae, posterior trochanters and posterior tarsi, *white*; (the four anterior femora are slightly reddish); abdomen beyond the basal plates, posterior femora and tibiae and the antennae, castaneous; wings hyaline, iridescent, venation dark brown except the costa, which is reddish.

Falls Church, Virginia. Described from two females recorded under Bureau of Entomology Number Hopk. U. S. 10168, material collected by C. T. Greene and reared by William Middleton.

Type-specimen.—Cat. No. 18189, U.S.N.M.

DIMORPHOPTERYX CASTANEAE, new species.

Female.—Length, 8 mm. Labrum long, broadly rounded apically; clypeus evenly convex, shining, with scattered, large, well-defined punctures, the apical margin subsquarely emarginate, the lobes rec-

¹ Can. Ent., vol. 40, 1908, p. 368.

tangular, about half as broad as the emargination; supraclypeal area flat; ocellar basin well defined by broad rounded walls sloping inwardly, elongate and confluent with the middle fovea, but deepest immediately in front of the ocellus; area latrad of the antennal furrows shining with widely scattered punctures; the postocellar furrow well defined, slightly curved anteriorly; postocellar area about one-fifth wider posteriorly, well defined; third antennal joint one-third longer than the fourth; sculpture of the thorax normal; sheath straight above, subtruncate apically, with the lower angle rounded. Black; labrum, tegulae, scutellum, apices of coxae, trochanters, four anterior tibiae and tarsi, posterior tarsi *whitish*; abdomen beyond the basal segments except the sheath, the posterior femora and tibiae except the apex of the latter, castaneus; wings hyaline, iridescent, venation dark brown.

Male.—Length, 7 mm. Labrum obtusely rounded apically, clypeus flat as in the female; head and thorax as in the female; hypopygium broadly rounded apically. Colored as the female except the scutellum is black; the apices of the posterior tibiae are hardly black.

Falls Church, Virginia. Described from two females and three males recorded under Bureau of Entomology Number Hopk. U. S. 10157*e, f, g, h*. Material collected and reared by W. Middleton and the author.

Type-specimen.—Cat. No. 18187, U.S.N.M.

DIMORPHOPTERYX QUERCIVORA, new species.

Male.—Length, 7 mm. Labrum strongly convex basally, apical margin subtruncate; clypeus gently convex, broadly subsquarely emarginate, lobes rectangular, about one-third as wide as the emargination; supraclypeal area gently convex; ocellar basin rather well defined by broad low walls, partly separated from the middle fovea; if the separation were complete it would be trapezoidal; the area latrad of the ocelli, the posterior orbits, the postocellar area with large, well-defined, scattered punctures; antennal furrows complete; postocellar furrow well defined; flagellum flat, second joint two-thirds the length of the first; scutum with punctures rather more dense than on the prescutum; punctures of the scutellum large; hypopygium broadly rounded apically. Black; labrum, anterior margin of clypeus, tegulae, spot on the scutellum, four anterior legs below the apices of the coxae, apices of the posterior coxae, trochanters *yellowish white*; abdomen beyond basal plates, posterior femora and tibiae castaneus; posterior tarsi, except the base of the first joint, pale ferruginous; wings hyaline, iridescent, venation black.

Tomahawk Lake, Wisconsin. Described from one male recorded under Bureau of Entomology Number Hopk. U. S. 10171, material collected by S. A. Rohwer and reared by William Middleton.

Type-specimen.—Cat. No. 18188, U.S.N.M.